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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,833	01/29/2001	Takehiko Numata	3531.65151	9342
24978	7590	10/04/2004	EXAMINER	
GREER, BURNS & CRAIN 300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			ORTIZ CRIADO, JORGE L	
		ART UNIT	PAPER NUMBER	
		2655		

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/771,833	NUMATA, TAKEHIKO	
	Examiner	Art Unit	
	Jorge L Ortiz-Criado	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 30 August 2004.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) Claim(s) _____ is/are allowed.
6) Claim(s) 1-10 is/are rejected.
7) Claim(s) _____ is/are objected to.
8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

a. Claims 1, 3, 5, 7, 8, 9 and 10 recite the limitation "increments of one integer". The specification does not provide proper antecedence basis for these limitations.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3 and 5 are drawn to an optical storage medium for storage information having land tracks and groove tracks. The storage medium would be capable of storing information. How the storage medium is "capable of recording and/or reproducing information"?

Claim Rejections - 35 USC § 102

4. Claims 1, 2, 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Senshu U.S. Patent No. 6,058,099.

Regarding claim 1, Senshu discloses an optical storage medium having land tracks and groove tracks alternately formed and capable of recording and/or reproducing information with respect to said land tracks and said groove tracks (See Abstract), comprising:

a plurality of first ID portions respectively having first track addresses as consecutive numbers given to said land tracks (See col. 3, lines 39-52, "consecutive odd numbers"; Figs. 3,5,6,13) and

a plurality of second ID portions respectively having second track addresses as consecutive numbers given to said groove tracks independently of said consecutive numbers of said first track addresses (See col. 3, lines 39-52, "consecutive even numbers"; Figs. 3,5,6,13)

wherein said consecutive numbers are in increments of one integer (i.e. even consecutive numbers 2,4,6,8... etc. and odd consecutive numbers 1,3,5,7... etc. incrementing by one integer, integer number 2).

Regarding claim 2, Senshu discloses wherein each of said first ID portions has a first identifier for identifying said land tracks (See col. 4, lines 29-35; Figs. 3,5,6,13) and each of said second ID portions has a second identifier for identifying said groove tracks (See col. 4, lines 29-35; Figs. 3,5,6,13) and

wherein each of said first ID portions is provided in each of first headers (See col. 4, lines 29-35; Figs. 3,5,6,13) and

each of said second ID portions is provided in each of second headers (See col. 4, lines 29-35; Figs. 3,5,6,13).

Regarding claim 7, Senshu discloses an optical storage device for transferring information by logical block addresses to an optical storage medium having land tracks and groove tracks alternately formed and given a plurality of track addresses and a plurality of sector addresses (See col. 6, lines 11-15), comprising:

a producing unit for producing said logical block addresses for giving consecutive numbers to said track addresses of one kind of said land tracks and said groove tracks in each sector (See col. 3, lines 39-52; "consecutive even numbers"; col. 6, lines 16-18, Fig. 3,8,16), giving consecutive numbers to said track addresses of the other kind of said land tracks (See col. 3, lines 39-52, "consecutive odd numbers"; Fig. 3,8)

and said groove tracks in each sector so that said consecutive numbers of said track addresses of the other kind are consecutive to said consecutive numbers of said track addresses of said one kind (See col. 3, lines 39-52; "odd consecutive numbers and even consecutive numbers"; Fig. 3,8); and

a converting unit for converting said logical block addresses into said track addresses and said sector addresses of said optical storage medium (See col. 6, lines 28-35).

wherein said consecutive numbers are in increments of one integer (i.e. even consecutive numbers 2,4,6,8... etc. and odd consecutive numbers 1,3,5,7... etc., incrementing by one integer, integer number 2).

Regarding claim 9, Method claim 9 is drawn to the method of using the corresponding optical storage device claimed in claim 7. Therefore method claim 9 corresponds to device claim 7 and is rejected for the same reasons of anticipation as used above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Senshu U.S. Patent No. 6,058,099 in view of Horimai et al. U.S. Patent 6,215,758.

Regarding claims 3 and 5, Senshu discloses an optical storage medium having land tracks and groove tracks, and capable of recording and/or reproducing information with respect to said land tracks and said groove tracks (See col. 3, lines 39-52; Figs. 3,5,6,13)) comprising:

a plurality of first ID portions respectively having first track addresses as consecutive numbers given to said land tracks (See col. 3, lines 39-52, "consecutive odd numbers"; Figs. 3,5,6,13);

and a plurality of second ID portions respectively having second track addresses as consecutive numbers given to said groove tracks (See col. 3, lines 39-52, "consecutive odd numbers"; Figs. 3,5,6,13)

said consecutive numbers of said (second, first) track addresses being consecutive to said consecutive numbers of said (first, second) track addresses (See col. 3, lines 39-52, "consecutive odd numbers", "consecutive even numbers" and "consecutive number"; Figs. 3,5,6,13).

said consecutive numbers of said (first, second) track addresses being consecutive to said consecutive numbers of said (second, first) track addresses in its immediately (See col. 3, lines 39-52, "consecutive odd numbers", "consecutive even numbers" and "consecutive numbers between first and second addresses"; Figs. 3,5,6,13).

wherein said consecutive numbers are in increments of one integer (i.e. even consecutive numbers 2,4,6,8... etc. and odd consecutive numbers 1,3,5,7... etc., incrementing by one integer, integer number 2).

Senshu further teaches the use of having land tracks and groove tracks alternately formed and divided into a plurality of groups (See col. 4, lines 56-67). But Senshu does not expressly disclose having a plurality of groups.

However this feature its well known in the art as evidenced by Horimai et al., which discloses having land tracks and groove tracks alternately formed and divided into a plurality of

groups (See Abstract, Figs. 1, 2) and having portions respectively having addresses for the grooves and land tracks (See Fig. 28).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to include land tracks and groove tracks alternately formed and divided into a plurality of groups and include said consecutive numbers of said first track addresses in any one of said groups being consecutive to said consecutive numbers of said second track addresses in its immediately preceding group in order to format of a recording medium suitable for a larger capacity providing high transfer rate, and integration of pits/lands/grooves as suggested by Horimai et al.

Regarding claims 4 and 6, Senshu further discloses wherein each of said first ID portions has a first identifier for identifying said land tracks (See col. 4, lines 29-35; Figs. 3,5,6,13), and each of said second ID portions has a second identifier for identifying said groove tracks (See col. 4, lines 29-35; Figs. 3,5,6,13), and wherein each of said first ID portions is provided in each of first headers and each of said second ID portions is provided in each of second headers (See col. 4, lines 29-35; Figs. 3,5,6,13).

Regarding claim 8, Senshu discloses an optical storage device for transferring information by logical block addresses to an optical storage medium having land tracks and groove tracks alternately formed and given a plurality of track addresses and a plurality of sector addresses (See col. 6, lines 11-15), comprising:

a producing unit for producing said logical block addresses for dividing said land tracks and said groove tracks, giving consecutive numbers to said track addresses of one kind of said land tracks and said groove tracks in each sector (See col. 3, lines 39-52; "consecutive even numbers"; col. 6, lines 16-18, Fig. 3,8,16),

giving consecutive numbers to said track addresses of the other kind of said land tracks and said groove tracks (See col. 3, lines 39-52, "odd consecutive numbers and even consecutive numbers"; Fig. 3,8)

so that said consecutive numbers of said track addresses of the other kind are consecutive to said consecutive numbers of said track addresses of said one kind (See col. 3, lines 39-52; "consecutive odd numbers", "consecutive even numbers" and "consecutive numbers between the two kinds"; Fig. 3,8); and

a converting unit for converting said logical block addresses into said track addresses and said sector addresses of said optical storage medium (See col. 6, lines 28-35).

wherein said consecutive numbers are in increments of one integer (i.e. even consecutive numbers 2,4,6,8... etc. and odd consecutive numbers 1,3,5,7... etc. incrementing by one integer, integer number 2).

Senshu further teaches the use of having land tracks and groove tracks alternately formed and divided into a plurality of groups (See col. 4, lines 56-67). But Senshu does not expressly disclose dividing the lands and the grooves into groups.

However this feature its well known in the art as evidenced by Horimai et al., which discloses having land tracks and groove tracks alternately formed and divided into a plurality of

groups (See Abstract, Figs. 1, 2) and having portions respectively having addresses for the grooves and land tracks (See Fig. 28).

Therefore it would have been obvious to one with ordinary skill in the art at the time of the invention to include land tracks and groove tracks alternately formed and divided into a plurality of groups and giving consecutive numbers to said track addresses of said one kind in the group next to said any group in each sector so that said consecutive numbers of said track addresses of said one kind in said next group are consecutive to said consecutive numbers of said track addresses of the other kind in said any group by providing continuity between the land and the groove tracks as teaches by Senshu and further in order to format of a recording medium suitable for a larger capacity providing high transfer rate, as suggested by Horimai et al.

Regarding claim 10, Method claim 10 is drawn to the method of using the corresponding optical storage device claimed in claim 8. Therefore method claim 10 corresponds to device claim 8 and is rejected for the same reasons of obviousness as used above.

Response to Arguments

7. Applicant's arguments filed 08/30/2004 have been fully considered but they are not persuasive.

With regard to claims 1,2,7 and 9 as unpatentable over Senshu and with regard to claims 3-6, 8 and 10 as unpatentable over Senshu in combination with Horimai et al., Applicants argue that Senshu does not disclose an optical storage medium in which land tracks have a plurality of

first ID portions respectively having first track addresses as consecutive numbers in increments of one integer and groove tracks have a plurality of second ID portions having second track addresses as consecutive numbers in increments of one integer and are numbered independently of each other.

The Examiner cannot concur because, Senshu discloses a plurality of first ID portions respectively having first track addresses as consecutive numbers given to the land tracks ("consecutive odd numbers") and a plurality of second ID portions respectively having second track addresses as consecutive numbers given to the groove tracks ("consecutive even numbers"). The odds numbers are numbers independently from even numbers, and even numbers are consecutive as odd numbers are consecutive (i.e. even consecutive numbers 2,4,6,8... etc. and odd consecutive numbers 1,3,5,7... etc.), and as claimed Senshu discloses wherein said consecutive numbers are **in increments of one integer** (i.e. even consecutive numbers 2,4,6,8... etc. and odd consecutive numbers 1,3,5,7... etc., incrementing by one integer, integer number 2).

An integer, (e.g. Merriam Webster Dictionary: **is any of the natural numbers, the negatives of these numbers, or zero; i.e. 1, 2, 3... -1, -2, -3, -4...**)

Senshu discloses incrementing the consecutive numbers are in increments of one integer (i.e. **integer number 2**), odd numbers incrementing as $1 + 2 = 3$, $3 + 2 = 5$, etc... and even numbers incrementing as $2 + 2 = 4$, $4 + 2 = 6$, etc.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on

notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

Applicants argued that unlike Senshu, it is not necessary to switch servo conditions and recording/reproducing conditions between the tracks at the time of track accessing and also argued and relies on the regarding access method of Senshu.

The Examiner cannot find where, when or how the track accessing of the present claims invention are performed or cited in the claims. The numbering of the tracks addresses does not provides the accessing order of the tracks because the numbering of the tracks could be used merely for track identification and or as differentiates between grooves from lands.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "accessing of the tracks") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm),Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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